Memo To Comcast: Show Us the Meter for Metered Broadband

Om Malik | Thursday, August 28, 2008 | 11:37 PM PT | 64 comments
What Your ISP Doesn't Want You to Know

As no doubt everyone knows by now (except maybe Barack Obama, who had better things to do tonight), Comcast has announced an upcoming 250 GB/month bandwidth cap on its residential broadband cable Internet customers, all of whom have signed up for unlimited service based on Comcast's own advertising.

Before I get to reaming them out, I'd like to state for the record that (a) I'm a Comcast customer, (b) I'm more or less a satisfied Comcast customer, (c) I'm also a captive Comcast customer, since our county commissioners saw fit to make a monopoly deal with Comcast, no doubt in exchange for lots of money promises of excellent service. So if they should happen to cut me off for what they call "excessive use" or even for writing this article, I will have nowhere to go but dialup or satellite, which is to say: hell.

First of all, let us not look at Comcast or any particular broadband ISP, but all of them. Because as American taxpayers, we've already paid $200 billion to upgrade our country's Internet infrastructure to a 45 Mbps fiber optic network. And we paid this money more or less directly to the telecoms: the giant companies that run everyone's landline telephone service. And we don't have this system yet, in spite of the fact that we were supposed to have it running years ago.

Here are some links to explain how this sad state of affairs happened:

* Telcos Lay $200 Billion Goose Egg
* The $200 Billion Broadband Scandal
* History of the Bell Companies

OK, so we've been ripped off. This happens all the time when big companies with lots of cash get together with legislators to write their own laws. But wait, there's more. Lots more.

There is a secret and central axiom in the business model of every consumer ISP, from the smallest dialup company to the largest fiber optic network or cellular / mobile phone service provider. Here it is:

* Charge the customer for services never used

I'm going to try to be fair here. At no time am I suggesting they're doing anything illegal or even immoral. This is what they know as normal business, coupled with the general lassitude and lack of knowledge on the part of most consumers. And that's not because the consumers are stupid, just uninformed.

As a contrast, you should know that when businesses buy Internet access from the very same companies that you do, they get SLAs: Service Level Agreements, which spell out exactly what the financial consequences are to the ISP if the service is not to the agreed-upon standard. That's a big difference, by far, from signing up for unlimited service and then having Comcast say that means 250 GB/month (or 5 GB/month in the case of Sprint Mobile).

So here's what I mean. Are you a "power user"? Do you spend a lot of time surfing the net, possibly working from home (which, in today's energy climate, could be considered extremely patriotic!), watching streaming video or downloading movies instead of going to a noisy, expensive movie theater when you probably have a better viewing experience at home? Do you get a great deal of use out of your mobile phone, maybe downloading ringtones, surfing the web, doing email, and watching YouTube clips?

Well, in that case, as far as your ISP or mobile provider is concerned, instead of being a "good customer", you're really more like a Hell's Angel. A 1-percenter. A bad guy. An excessive user. Why?

Because compared to you, the average customer barely uses their Internet connection or mobile phone! And an amazingly large percentage of customers (the exact number varies but is a closely guarded secret at most of these companies) never use their service at all.

That’s right. They pay the same fixed monthly fee you do, but don’t do anything with it. Maybe they have it for emergencies, or for impressing their friends, or because everyone else does, or they’re elderly or mentally challenged, and someone talked them into signing up for it.

But they’re bread and butter to the providers, who count on all these users to pay their overhead costs and a good part of their profit. Really, this is the key to the whole business.

And what about you power users? Oh, guess what, they make money on you too! Don’t forget, you paid for unlimited use, but really you’re not going anywhere near “unlimited”. You’re just using your fair share, which is what you paid for. And also to be fair, there are no doubt people out there running commercial websites, porno rings, or whatever using their home Internet connections, and really are excessive users, but they are way less than the 1% figure we keep hearing.

Now, your provider has set up its infrastructure and rates with the “average user” in mind. You know, the one who uses anywhere from zero to 66 MB/day. Where did I get that 66 MB/day figure?

From the above WebProNews.com article (and please note this was published in 2006): Today’s average residential broadband user consumes about 2 gigabytes of data per month, Kafka estimated, which costs the service provider about $1. As downloading feature films becomes more popular, they might consume an average of 9 gigabytes per month, costing carriers $4.50.

2 gigabytes/month = 66 megabytes/day, roughly. Well, let’s put that into perspective. If you were a web developer like me back in the 1990s, you’ll remember we all used to optimize our HTML pages to get them under 30 KB because everyone was on 56 Kbps dialup lines. Nobody does that anymore, because virtually nobody uses dialup anymore. When I started working on this article an hour or two ago, I downloaded a bandwidth metering program, just for fun. And just in the course of writing and researching this article (and whatever email, etc. — not file sharing, thank you — was going on in the

background), I've apparently used 80 MB already (and another 20 MB for final editing!). So how much surfing does a 2 GB/month user really do, I wonder?

And here's another thought to put into your hopper. This 2 GB/month figure was apparently an industry-wide average two years ago. And Comcast says the average (that is, the median!) user still does 2 to 3 GB/month now. Do you think that makes sense, given the explosion in online video alone in the past two years, not to mention the size of a single Web 2.0 page from, say, Digg?

I believe the real key is buried in this list of "talking points" that Comcast uses to illustrate to their so-called average user how insanely big 250 GB really is. They say that with 250 GB, you could:

* Send 50 million emails (at 0.05 KB/email)
* Download 62,500 songs (at 4 MB/song)
* Download 125 standard-definition movies (at 2 GB/movie)
* Upload 25,000 hi-resolution digital photos (at 10 MB/photo)

Apart from the fact that the average email is closer to 9 KB than 0.05 KB (they're clearly assuming the average email is a URL someone sends you, probably for Viagra) and that you'd get your service terminated way before hitting even 10 million emails, the "gotcha" in this list is staring us all right in the face.

Sure, not many people are going to download 125 movies a month, but if everyone downloaded just one movie a month, it would be doubling the amount of bandwidth that Comcast says we're all using now. And everyone expects video use of the Internet to explode. And Comcast is scared that we're suddenly going to start using the bandwidth we've been paying for, while they've been coasting along with millions of customers using effectively nothing all this time. And how many people even watch only one movie (or two hour-long TV shows) a month?

And the explosion in Internet use by phones, heralded by the iPhone, is scaring the mobile providers for the same reason.

So that’s it in a nutshell. You’re really not doing anything wrong by using the Internet connection you paid for: your ISP simply wishes you wouldn’t. They want everyone to pay them $40 to $80 a month for “unlimited” bandwidth and then hardly use any of it.

Really, wouldn’t you like to have a business like that too?